From glowbugs@theporch.com Tue Jul 9 22:23:05 1996
Return-Path: glowbugs@theporch.com
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com
(8.7.5/AUX-3.1.1) with SMTP id WAA00522; Tue, 9 Jul 1996 22:01:16 -0500 (CDT)
Date: Tue, 9 Jul 1996 22:01:16 -0500 (CDT)
Message-Id: <199607100301.WAA00522@uro.theporch.com>
Errors-To: ws4s@midtenn.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 231
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: O

GLOWBUGS Digest 231

Topics covered in this issue include:

Date: Tue, 09 Jul 96 06:37:13 CST
From: "Cory Hine" <hinec@ccgate.dl.nec.com>
To: glowbugs@theporch.com

Subject: 4CX1000A
Message-ID: <9606098369.AA836916851@smtpgw.ccgate.dl.nec.com>

I have a 4CX1000A, new, if anyone is interested. I will let it go for 50% of retail ie, $350.

Cory

Date: Tue, 9 Jul 1996 07:44:16 -0600
From: Brad Mugleston <bmug@gwl.com>
To: glowbugs@theporch.com
Subject: Re: GLOWBUGS digest 230
Message-ID: <199607091344.AA15663@gp-ipc103.gwl.com>

Gang,

I'm sure a lot of us sitting out here in the cold dark world of transistors would love to build something that glows. How about publishing Patricks responses here insted of direct. Also I've looked into building something that glows but my biggest problem seems to be a power supply.

Thanks

de KB0ROL, Brad

> Hi All,
>
> I'm a new subscriber to this list and I have a question that
> I would normally look in the FAQ for, but since one doesn't
> exist yet, I thought I'd give it a go.
>
> Where can I find some plans for building some simple tube-based
> rigs? I would imagine that old QSTs are a good source; could someone
> recommend a few projects/issues I might look for?
>
> Private email is OK and thanks in advance,
>
>
>
> -Patrick N1OCJ
>

Date: Tue, 9 Jul 96 10:02:22 EDT
From: Clark Fishman (FSAC) <cfishman@PICA.ARMY.MIL>
To: glowbugs@theporch.com
Subject: WTB 8877's
Message-ID: <9607091002.aa15168@COR6.PICA.ARMY.MIL>

A friend of mine is looking for some used 8877's for some of
his home brew amps...he does not have E-mail...I do...

Let me know,,, Tnx, Clark Fishman WA2UNN

                    cfishman@pica.army.mil

Date: Tue, 09 Jul 1996 08:51:39 PDT
From: Jeff Duntemann <jeffd@coriolis.com>
To: glowbugs@theporch.com
Subject: Building info
Message-ID: <1.5.4.16.19960709084850.16f72ba8@ntserver.coriolis.com>

Patrick--

The very best 1-tube tranmsmitter I ever built was published in the March 1971 QST, by Lew McCoy and Gus Wilson, Page 25. The title of the article as given is uninspiring, so I named the transmitter the 69er, because it uses a single 6T9. (6T9...69, get it?) It's really two tubes in one envelope, so you can say you built a one-tube CW machine without the chirpyness I always get on a keyed oscillator. The triode section is a Pierce oscillator, and the pentode power amp section is the final. It puts out about 5 watts if I remember correctly (I haven't run it in a number of years) and gave me no trouble in any way. AES sells the 6T9 for only $2.30, so if you can corner the other parts it won't eat the center out of your paycheck.

That's my recommendation. It's a good rig to start with. Higher power and bandswitching is more of a challenge.

--73--

--Jeff Duntemann KG7JF
  Scottsdale, Arizona

Date: Tue, 09 Jul 1996 12:25:58 -0400
From: Roy Morgan <morgan@speckle.ncsl.nist.gov>
To: glowbugs@theporch.com
Subject: Re: Building info
Message-ID: <9607091625.AA11672@speckle.ncsl.nist.gov>

At 10:51 AM 7/9/96 -0500, you wrote:
>
>The very best 1-tube tranmsmitter I ever built was published in the March
>1971 QST, ... it uses a single 6T9.

> ... Higher power and bandswitching is more of a challenge.

Bandswitching? Why switch?

Just build one for each band. :-)

-- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --

---

Date: Tue, 9 Jul 1996 09:38:39 -0700 (PDT)
From: tomrice@netcom.com (Tom R. Rice)
To: glowbugs@theporch.com
Subject: Firebottle rigs.....
Message-ID: <199607091638.JAA24192@netcom20.netcom.com>

>
> The very best 1-tube tranmsmitter I ever built was published in the March
> 1971 QST, by Lew McCoy and Gus Wilson, Page 25. The title of the article as
> given is uninspiring, so I named the transmitter the 69er, because it uses a
> single 6T9. (6T9...69, get it?) It's really two tubes in one envelope, so

> --Jeff Duntemann KG7JF

I certainly agree with Jeff D. about the 6T9 rig,
which appears in ARRL Handbooks through the
mid-Seventies.

Another favorite is the classic 6L6-807 xmtr, with
plate modulation (if desired) as shown in Handbooks

of the Forties. This was the basis for two Millen
rigs. In my 1944 Handbook, this rig is shown on
pages 259-261 as "A Two-Tube Plug-In Coil Exciter".

(It excites me, fer shur, but those boys were thinking
Big-Rig, like a full-rack machine; separate chassis
for power supplies (LV & HV), modulator, exciter,
PA and tuner.)

An earlier version of this rig is shown in QST for May, 1941
in an article "Emergency Transmitter Design Considerations"
by W2JHR & W2MBS. This includes a built-in plate modulator
using p-p 6L6 tubes. Unfortunately, it also uses a Stancor
A-3845 modulation xfmr, which I don't have |-(

Both rigs are currently planned for this station, with
emphasis on 160-meter use. Maybe I can plate-modulate
the 6T9 final.....

73 de WB6BYH

--
"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com
CIS: 71160,1122

Date: Tue, 9 Jul 1996 10:57:57 -0600
From: "Deane D McIntyre" <dmcintyr@acs.ucalgary.ca>
To: glowbugs@theporch.com
Subject: Re: Firebottle rigs.....
Message-ID: <9607091657.ZZ19270@ds1.acs.ucalgary.ca>

In message <199607091638.JAA24192@netcom20.netcom.com> writes:
>
> >
> > The very best 1-tube tranmsmitter I ever built was published in the March
> > 1971 QST, by Lew McCoy and Gus Wilson, Page 25. The title of the article
> > as
> > given is uninspiring, so I named the transmitter the 69er, because it uses
> > a
> > single 6T9. (6T9...69, get it?) It's really two tubes in one envelope, so
>
> > --Jeff Duntemann KG7JF
>
>   I certainly agree with Jeff D. about the 6T9 rig,

>   which appears in ARRL Handbooks through the
>   mid-Seventies.

(Material on 807 rig deleted)

>   Both rigs are currently planned for this station, with
>   emphasis on 160-meter use. Maybe I can plate-modulate
>   the 6T9 final.....

Sounds like an excellent idea. The 1969 Handbook has a CW/AM rig in which
this was in fact done, for 160 metre operation to boot!

Uses two 6T9 (one for osc/PA, the other as the modulator) tubes as well as
a third tube (one of the 12A?7 twin triodes I think) for the low level
audio stages. Looks like a fun rig.

73, Deane D McIntyre VE6BPO
dmcintyr@acs.ucalgary.ca

Date: Tue, 9 Jul 1996 13:48:23 -0500 (CDT)
From: Chris Broadbent <cfb@bga.com>
To: glowbugs@theporch.com
Subject: Re: Building info
Message-ID: <199607091848.NAA28670@zoom.bga.com>

>
> Patrick--
>
> The very best 1-tube tranmsmitter I ever built was published in the March
> 1971 QST, by Lew McCoy and Gus Wilson, Page 25. The title of the article as
>
> ...<SNIP>
>
> --73--
>
> --Jeff Duntemann KG7JF
>   Scottsdale, Arizona
>

I am currently working on a 50W CW TX design based on a single 6LR8 tube.
The circuit is in the 1987 book (3rd printing) "Complete Guide to Amateur
Radio" by Joseph DuBovy.

The 6LR8 is a Novar base TV sweep tube with a triode (oscillator) and tetrode (amplifier) in one envelope. The TX is keyed by interrupting the cathode circuit of the tetrode (thus leaving the triode oscillator running and stable).

It is a fixed frequency design that uses a fundamental freq 40M or 80M crystal. The triode is wired as an electron coupled oscillator.

The tetrode output goes to the antenna via a Pi tuning circuit (to both match impedances and provide some low pass filtering, as I understand it).

I plan on including a few crystals with a switch. Later, I plan on including an inductor and variable cap in series with the crystal, such that I can bend the frequency by a few KHz for each crystal.

How well does it work? I don't know as I'm still getting the bits together. Has anyone else built this particular TX? It appears straightforward and simple enough. I can't imagine why it wouldn't work as advertised.

Cheers,

--

Chris F. Broadbent (cfb@bga.com)

Date: Tue, 09 Jul 1996 14:22:04 PDT
From: Jeff Duntemann <jeffd@coriolis.com>
To: glowbugs@theporch.com
Subject: Re: Building info
Message-ID: <1.5.4.16.19960709141917.2d67a4b4@ntserver.coriolis.com>

Chris Broadbent said:

>The 6LR8 is a Novar base TV sweep tube with a triode (oscillator) and tetrode
>(amplifier) in one envelope. The TX is keyed by interrupting the cathode
>circuit of the tetrode (thus leaving the triode oscillator running and
>stable).

This sounds good, but the "novar" base is one socket I am absolutely clueless where to find. Do similar bottles exist on a 12-pin Compactron base? Those at least you can get at AES.

Do let us know how this project works out. I'd like to try something like that myself.

--73--

--JD--

Date: Tue, 9 Jul 1996 16:56:40 -0500 (CDT)
From: Chris Broadbent <cfb@bga.com>
To: jeffd@coriolis.com
Cc: glowbugs@theporch.com
Subject: Re: Building info
Message-ID: <199607092156.QAA29325@zoom.bga.com>

>
> This sounds good, but the "novar" base is one socket I am absolutely
> clueless where to find. Do similar bottles exist on a 12-pin Compactron
> base? Those at least you can get at AES.
>

I was initially distressed by the socket choice, too. However, after some digging in the local surplus outlets, I found I was starving in the midst of quite a bit (not plenty, but enough :-)). They were not too hard to find. If you need help with one (Novar 9 pin chassis mount socket), let me know.

However, I am finding it a little difficult to find a transformer (for a reasonable price). AES has one, but they want >$50 for it. I'm looking for one with 300V-400V @ 200mA with CT secondary. An additional 6.3V @ >1A winding would be very nice, but not absolutely necessary. A 150V-200V @ 200mA with no CT will work also.

Anyone know where I might find such a beast at a reasonable price? I've looked at Fair Radio sales, All Electronics, Jameco, JDR and Mark V.   They don't have what I need.

> Do let us know how this project works out. I'd like to try something like
> that myself.
>

Absolutely! I'm looking forward to earning my tube/valve wings (I'm ramping up on tube/valve design as fast as I can). The bragging rights gained from succeeding will be wonderful :-) ! BTW, 50W is a nice output for such a simple design.

--

Chris F. Broadbent

End of GLOWBUGS Digest 231
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